

3342. Find Minimum Time to Reach Last Room II

Solved ●

Medium  Topics  Companies  Hint

There is a dungeon with $n \times m$ rooms arranged as a grid.

You are given a 2D array `moveTime` of size $n \times m$, where `moveTime[i][j]` represents the **minimum** time in seconds when you can **start moving** to that room. You start from the room $(0, 0)$ at time $t = 0$ and can move to an **adjacent** room. Moving between **adjacent** rooms takes one second for one move and two seconds for the next, **alternating** between the two.

Return the **minimum** time to reach the room $(n - 1, m - 1)$.

Two rooms are **adjacent** if they share a common wall, either *horizontally* or *vertically*.

Example 1:

Input: `moveTime = [[0,4],[4,4]]`

Output: 7

Explanation:

The minimum time required is 7 seconds.

- At time $t == 4$, move from room $(0, 0)$ to room $(1, 0)$ in one second.
- At time $t == 5$, move from room $(1, 0)$ to room $(1, 1)$ in two seconds.

Example 2:

Input: `moveTime = [[0,0,0,0],[0,0,0,0]]`

Output: 6

Explanation:

The minimum time required is 6 seconds.

- At time $t == 0$, move from room $(0, 0)$ to room $(1, 0)$ in one second.
- At time $t == 1$, move from room $(1, 0)$ to room $(1, 1)$ in two seconds.
- At time $t == 3$, move from room $(1, 1)$ to room $(1, 2)$ in one second.
- At time $t == 4$, move from room $(1, 2)$ to room $(1, 3)$ in two seconds.

Example 3:

Input: `moveTime = [[0,1],[1,2]]`

Output: 4

Constraints:

- $2 \leq n == \text{moveTime.length} \leq 750$
- $2 \leq m == \text{moveTime}[i].\text{length} \leq 750$
- $0 \leq \text{moveTime}[i][j] \leq 10^9$

Seen this question in a real interview before? 1/5

Yes No

Accepted 12.2K Submissions 25.3K Acceptance Rate 48.2%

Topics	▼
Companies	▼
Hint 1	▼
Similar Questions	▼
Discussion (19)	▼